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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/597,614

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EXAMINER

CHOWDHURY, NIGAR

ART UNIT

PAPER NUMBER

2621

NOTIFICATION DATE

DELIVERY MODE

06/25/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com
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Office Action Summary	Application No. 10/597,614	Applicant(s) TANAKA ET AL.	
	Examiner NIGAR CHOWDHURY	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/7/2006,01/03/2007,01/28/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim(s) 10 is/are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 10 defines **a program** embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory

Art Unit: 2621

in most cases since use of technology permits the function of the descriptive material to be realized” – Guidelines Annex IV). That is, the scope of the presently claimed **a program** can range from paper on which the program is written, to a program simply contemplated and memorized by a person.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-2, 10 are rejected under 35 U.S.C. 102(e) as being anticipated by US 7,206,892 by Kim et al.

2. Regarding **claim 1**, a playback device for playing back a digital stream and an application which are recorded on a recording medium, in conjunction with each other, comprising:

- a playback unit operable to play back the digital stream (fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54); and
- a platform unit operable to execute the application to perform playback control (fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54), wherein
- the playback unit has a plurality of real parameters used for the playback control, the plurality of real parameters being specific to the playback device (fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54),
- the platform unit includes:

- an execution unit operable to interpret and execute the application; and
- a module unit having a function to be provided to the application, and operable to perform the playback control (fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54), and
- the playback control causes, via the function, the playback unit to play back the digital stream based on one of the plurality of real parameters (fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54).

3. Regarding **claim 2**, the playback device wherein

- the function to be provided to the application is a function of supplying special playback information to the application in response to a call from the application in execution, the special playback information showing a correspondence between a plurality of user events and the plurality of real parameters (fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54),
- the playback control of the module unit responds to a function call from the application (fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54), and
- the special playback information is used for the function call (fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54).

4. **Claim 10** is rejected for the same reason as discussed in the corresponding claim 1 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,206,892 by Kim et al. in view of US 6,360,053 by Wood et al.

6. Regarding **claim 3**, Kim discloses the playback unit has a plurality of real parameters used for the playback control, the plurality of real parameters being specific to the playback device (fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54) but fails to disclose the playback device wherein

- each of the plurality of user events shows a type of a button pushed by a user, and
- each of the plurality of real parameters shows a playback rate multiplication factor.

Wood et al. discloses

the playback device wherein

- each of the plurality of user events shows a type of a button pushed by a user (col. 3 lines 35-50), and
- each of the plurality of real parameters shows a playback rate multiplication factor (col. 3 lines 35-50).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Kim's system to include playback rate multiplication factor, as taught by Wood et al., for user to have more flexibility to change the playback rate multiplication factor based on the button pushed by the user.

7. **Claim 4** is rejected for the same reason as discussed in the corresponding claim 3 above.

8. **Claim 5** is rejected for the same reason as discussed in the corresponding claim 3 above.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,206,892 by Kim et al. in view of US 4,873,584 by Hishimoto.

10. Regarding **claim 6**, Kim discloses the playback unit has a plurality of real parameters used for the playback control, the plurality of real parameters being specific to the playback device (fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54) but fails to disclose the playback device wherein

- the function to be provided to the application is a function of supplying array data listing the plurality of real parameters to the application, in response to a call from the application in execution.

Hishimoto discloses the playback device wherein

- the function to be provided to the application is a function of supplying array data listing the plurality of real parameters to the application, in response to a call from the application in execution (fig. 4, col. 3 lines 15-34).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Kim's system to include array data list, as taught by Hishimoto, of plurality of real parameters to the application for executing.

11. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,206,892 by Kim et al. in view of US 7,672,566 by Seo et al.

12. Regarding **claim 7**, Kim discloses a platform unit operable to execute the application to perform playback control (fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54) but fails to disclose the playback device wherein the execution unit controls rendering of graphics by interpreting and executing the application.

Seo et al. discloses the playback device wherein the execution unit controls rendering of graphics by interpreting and executing the application (fig. 5-6, col. 9 lines 11-55).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Kim's system to include

Art Unit: 2621

graphics data, as taught by Seo et al., for having more flexibility to a user to watch video and audio data associated with graphics data.

13. Regarding **claim 8**, the playback device wherein

- the function to be provided to the application is a function of supplying special playback information to the application in response to a call from the application, the special playback information showing a correspondence between a plurality of user events and the plurality of real parameters specific to the playback device (Kim, fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54),
- the module unit performs the playback control in response to a function call from the application using the special playback information (Kim, fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54), and
- the application controls the rendering of the graphics based on the special playback information acquired via the function (Seo et al., fig. 5-6, col. 9 lines 11-55).

14. Regarding **claim 9**, the playback device wherein

- the function to be provided to the application is a function of expanding a variable that corresponds to a playback rate, received from the application, into one of the plurality of real parameters that corresponds to

Art Unit: 2621

the playback rate, and supplying the expanded real parameter to the application (Kim, fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54),

- the module unit performs the playback control based on the expanded real parameter (Kim, fig. 2, 6, col. 1 lines 31-col. 2 lines 10, col. 4 lines 7-54), and
- the application controls the rendering of the graphics based on the expanded real parameter (Seo et al., fig. 5-6, col. 9 lines 11-55).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a) US 7,734,154

b) US 7,720,356

c) US 7,664,371

d) US 7,634,175

e) US 7,627,230

f) US 7,616,862

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIGAR CHOWDHURY whose telephone number is (571)272-8890. The examiner can normally be reached on 9-5.

Art Unit: 2621

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NC
06/17/2010

/JAMIE JO ATALA/
Primary Examiner, Art Unit 2621